

### A brachypronotal example of *Tetrix ceperoi* Bolivar (Orthoptera: Tetrigidae) at Dungeness

Cepero's groundhopper *Tetrix ceperoi* Bolivar is the rarest of the three British tetrigids, although it is common at Dungeness. During a visit to an area east of Boulderwall Farm on 1.ix.2002 with Peter Hodge, I collected a strange tetrigid from among coarse shingle at the edge of a pit (at O.S. grid reference TR 065198). Many examples of adult *T. ceperoi* were found in the same area, but other *Tetrix* species were not detected. Identification of British tetrigids is based mainly on the morphology of the head and pronotum (Brown, 1950. Notes on the taxonomy, British distribution and ecology of *Tetrix subulata* (L.) and *T. ceperoi* I. Bolivar (Orthopt., Tetrigidae). *J. Soc. Br. Ent.* 3: 189-200). The shape of the vertex of the Dungeness specimen (a female) resembles my reference material for *T. ceperoi*. Unusually, the specimen is brachypronotal (Fig 1.).



The only published report of brachypronotal *T. ceperoi* appears to be that of Ingrisch (1983. Neue Arten und faunistisch bemerkenswerte Nachweise von Orthopteren auf Sardinien. *Nachrichtenblatt der Bayerischen Entomologen* 32: 88–94) from Sardinia. Superficially, the Dungeness specimen resembles Ingrisch's figures, but differs in that it shows a combination of both adult and larval features: the alae are fully developed, the ovipositor shows the pilosity of an adult; but tegmina are not visible and the line of the dorsal keel of the hind femur, anterior to the knee, is unbroken, as is normal for nymphs.

Retention of larval features by adults is normal for some organisms such as the axolotl. Interestingly, it is normal for some species of tetrigid to demonstrate neoteny – for example, adults of the Iberian tetrigid *Uvarovitettix nodulosus* Fieber lack visible tegmina (Devriese, 1996. *Bijdrage tot de systematiek, morfologie en biologie van de West-Palearktische Tetrigidae*. *Saltabel* 15: 2-38). European tetrigids fall roughly into two groups; those with brachypronotal, flightless adults and macropronotal species with long wings. Among brachypronotal species,

macropronotal examples occur as rarities and vice versa. It seems likely that an important function of a long pronotum is to protect the wings. When collected, the wings of the Dungeness specimen were already badly damaged. For ground-dwelling tetrigids, wings and a long pronotum may be of little value or may be a hindrance, so their reduction may be advantageous for populations that do not need to disperse widely. In contrast, for tetrigids, such as *T. ceperoi* that specialise in exploiting fragmented unstable habitats, fully-developed wings (protected by a long pronotum) may be necessary for dispersal.

The Dungeness specimen is clearly a rare aberration, but its occurrence possibly offers some insight into the history behind speciation in tetrigids. Less extreme neotenous variants possibly arise quite regularly by mutation. Brachypronotal, brachypterous forms would be selected against in species like *T. ceperoi* where there is often a need to disperse to new sites. The form that Ingrisch found in Sardinia may have been naturally selected in a locality that has remained stable for an unusually long time.

Other orthopteroids (Orthoptera, Dictyoptera and Dermaptera) found at Dungeness in the vicinity of Boulderwall Farm included *Tettigonia viridissima*, by song, 1.ix.2002, *Platycleis albopunctata*, 1.ix.2002, *Conocephalus discolor*, 11.viii.2002, 1.ix.2002, suggesting a further expansion of range since publication of Haes and Harding (1997. *Atlas of grasshoppers, crickets and allied insects in Britain and Ireland*. HMSO), *Chorthippus brunneus*, 11.viii.2002, 1.ix.2002, including one female var. 'green' sensu Ragge (1965. *Grasshoppers, crickets and cockroaches of the British Isles*. Warne: London), *Chorthippus albomarginatus*, 11.viii.2002, *Myrmeleotettix maculatus*, 21.vi.2001, 11.viii.2002, 1.ix.2002, *Ectobius panzeri*, 21.vi.2001, nymph, *Forficula auricularia*, 12.x 2001 and *Forficula lesnei*, 12.x. 2001, beaten from bramble.

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***Trichopria nigra* (Nees) (Hym.: Diapriidae) reared from *Sturmia bella* (Meigen) (Dipt.: Tachinidae) – a new host record**

On 23 August 2004 I collected two dipterous puparia from a thin covering of wind-blown, sandy soil under the basal leaves of a weed growing in an expansion joint in my concrete drive at Brantham, East Suffolk (O. S. grid reference TM 1134). On 26 August, a medium sized (approximately 8mm) tachinid fly with which I was unfamiliar hatched from one of the puparia whilst a few weeks later the other produced a host of parasitic wasps.

The fly, puparia and a sample of the wasps were sent to the Natural History Museum, London where the fly was identified as *Sturmia bella* (Meigen) and the wasps as *Trichopria nigra* (Nees) (= *inermis* Kieffer). *Sturmia bella* is a parasite of vanessid butterflies and was first recorded in this country from Southampton in 1998 (Ford *et al.*, 2000. *Ent. Rec.* **112**: 25 – 36), and since that time has spread rapidly. *Trichopria nigra* occurs commonly in the western Palaearctic with a range